

IN THE CLAIMS

Please cancel claims 2-4, 10-12, 18-20 and 26-28 without prejudice, and amend claims 1, 5, 9, 13, 17, 21, 25 and 29 as follows:

1. (Currently Amended) For use in a multimedia analysis system capable of analyzing content of multimedia signals, an apparatus for creating a multimedia table of contents of videotaped material, said apparatus comprising:

a multimedia table of contents controller capable of:  
receiving video signals, audio signals, and text signals of said videotaped material;

~~wherein said multimedia table of contents controller is capable of combining portions of said video signals, audio signals, and text signals of said videotaped material to create a table of contents of said videotaped material;~~

creating said table of contents of said videotaped material by selecting a video segment that relates to an element of said videotaped material, and by adding said video segment to said table of contents of said videotaped material; and

executing computer software instructions contained within a  
memory unit coupled to said controller:

to create said table of contents of said videotaped  
material by segmenting a video signal of said videotaped material  
into elements using a coarse table of contents segmentation  
application, and by locating video boundaries of said elements of  
said videotaped material using a coarse boundary detection  
application; and

to create said table of contents of said videotaped  
material by segmenting said video signal of said videotaped  
material into said elements using a fine table of contents  
segmentation application, and by locating said video boundaries of  
said elements of said videotaped material using a fine boundary  
detection application.

Claims 2-4 (Canceled)

5. (Currently Amended) The apparatus as claimed in ~~Claim 3~~  
Claim 1, wherein said controller further comprises:

an index module capable of linking said elements of said

videotaped material selected for said table of contents, and capable of linking said elements with combinations of audio, visual, and transcript cues.

6.(Original) The apparatus as claimed in Claim 5 wherein said controller further comprises:

a retrieval module capable of retrieving a table of contents stored in said memory unit and causing said table of contents to be displayed in response to a user request.

7.(Original) The apparatus as claimed in Claim 1 wherein said multimedia table of contents controller is capable of combining portions of said video signals, audio signals, and text signals of said videotaped material to create a multimedia index of said videotaped material.

8.(Original) The apparatus as claimed in Claim 7 wherein said multimedia index of said videotaped material comprises one of: a specialized topical multimedia index, a multimedia bibliography, and a multimedia glossary.

9. (Currently Amended) A multimedia analysis system capable of analyzing content of multimedia signals, said multimedia analysis system comprising an apparatus for creating a multimedia table of contents of videotaped material, said apparatus comprising:

a multimedia table of contents controller capable of:  
receiving video signals, audio signals, and text signals of said videotaped material;

~~wherein said multimedia table of contents controller is~~  
~~capable of combining portions of said video signals, audio signals,~~  
and text signals of said videotaped material to create a table of contents of said videotaped material;

creating said table of contents of said videotaped material by  
selecting a video segment that relates to an element of said  
videotaped material, and by adding said video segment to said table  
of contents of said videotaped material; and

executing computer software instructions contained within a  
memory unit coupled to said controller:

to create said table of contents of said videotaped  
material by segmenting a video signal of said videotaped material

into elements using a coarse table of contents segmentation application, and by locating video boundaries of said elements of said videotaped material using a coarse boundary detection application; and

to create said table of contents of said videotaped material by segmenting said video signal of said videotaped material into said elements using a fine table of contents segmentation application, and by locating said video boundaries of said elements of said videotaped material using a fine boundary detection application.

Claims 10-12 (Canceled)

13. (Currently Amended) The multimedia analysis system as claimed in ~~Claim 11~~ Claim 9, wherein said controller further comprises:

an index module capable of linking said elements of said videotaped material selected for said table of contents, and capable of linking said elements with combinations of audio, visual, and transcript cues.

14.(Original) The multimedia analysis system as claimed in Claim 13 wherein said controller further comprises:

a retrieval module capable of retrieving a table of contents stored in said memory unit and causing said table of contents to be displayed in response to a user request.

15.(Original) The multimedia analysis system as claimed in Claim 9 wherein said multimedia table of contents controller is capable of combining portions of said video signals, audio signals, and text signals of said videotaped material to create a multimedia index of said videotaped material.

16.(Original) The multimedia analysis system as claimed in Claim 15 wherein said multimedia index of said videotaped material comprises one of: a specialized topical multimedia index, a multimedia bibliography, and a multimedia glossary.

17.(Currently Amended) For use in a multimedia analysis system capable of analyzing content of multimedia signals, a method

for creating a multimedia table of contents of videotaped material,  
said method comprising the steps of:

receiving in a multimedia table of contents controller video  
signals, audio signals, and text signals of said videotaped  
material; and

combining portions of said video signals, audio signals, and  
text signals of said videotaped material in said multimedia table  
of contents controller to create said multimedia table of contents;

wherein the step of combining portions of said video signals,  
audio signals, and text signals of said videotaped material in said  
multimedia table of contents controller to create said multimedia  
table of contents comprises the steps of:

selecting a video segment that relates to an element of  
said videotaped material; and

adding said video segment to said table of contents of  
said videotaped material;

receiving in said multimedia table of contents controller  
instructions from computer software stored in a memory unit coupled  
to said multimedia table of contents controller;

executing said instructions in said multimedia table of

contents controller to segment a video signal of said videotaped material into elements using a coarse table of contents segmentation application;

executing said instructions in said multimedia table of contents controller to locate video boundaries of said elements of said videotaped material using a coarse boundary detection application;

executing said instructions in said multimedia table of contents controller to segment said video signal of said videotaped material into said elements using a fine table of contents segmentation application; and

executing said instructions in said multimedia table of contents controller to locate said video boundaries of said elements of said videotaped material using a fine boundary detection application.

Claims 18-20 (Canceled)

21. (Currently Amended) The method as claimed in ~~Claim 19~~  
Claim 17, further comprising the steps of:



linking said elements of said videotaped material selected for said table of contents using an index module; and

linking said elements of said videotaped material with combinations of audio, visual, and transcript cues using said index module.

22.(Original) The method as claimed in Claim 21 further comprising the steps of:

retrieving a table of contents stored in said memory unit in response to a user request using a retrieval module; and  
causing said table of contents to be displayed.

23.(Original) The method as claimed in Claim 17 further comprising the step of:

combining portions of said video signals, audio signals, and text signals of said videotaped material in said multimedia table of contents controller to create a multimedia index.

24.(Original) The method as claimed in Claim 23 wherein said multimedia index comprises one of: a specialized multimedia index,

a multimedia bibliography, and a multimedia glossary.

25. (Currently Amended) For use in a multimedia analysis system capable of analyzing content of multimedia signals, computer-executable instructions stored on a computer-readable storage medium for creating a multimedia table of contents of videotaped material, the computer-executable instructions comprising the steps of:

receiving in a multimedia table of contents controller video signals, audio signals, and text signals of said videotaped material; and

combining portions of said video signals, audio signals, and text signals of said videotaped material in said multimedia table of contents controller to create said multimedia table of contents;

wherein the step of combining portions of said video signals, audio signals, and text signals of said videotaped material in said multimedia table of contents controller to create said multimedia table of contents comprises the steps of:

selecting a video segment that relates to an element of said videotaped material; and

adding said video segment to said table of contents of  
said videotaped material;

receiving in said multimedia table of contents controller  
instructions from computer software stored in a memory unit coupled  
to said multimedia table of contents controller;

executing said instructions in said multimedia table of  
contents controller to segment a video signal of said videotaped  
material into elements using a coarse table of contents  
segmentation application; and

executing said instructions in said multimedia table of  
contents controller to locate video boundaries of said elements of  
said videotaped material using a coarse boundary detection  
application;

executing said instructions in said multimedia table of  
contents controller to segment said video signal of said videotaped  
material into said elements using a fine table of contents  
segmentation application; and

executing said instructions in said multimedia table of  
contents controller to locate said video boundaries of said  
elements of said videotaped material using a fine boundary

detection application.

Claims 26-28 (Canceled)

29. (Currently Amended) The computer-executable instructions stored on a computer-readable storage medium as claimed in ~~Claim 27~~ Claim 25, further comprising the steps of:

linking said elements of said videotaped material selected for said table of contents using an index module; and

linking said elements of said videotaped material with combinations of audio, visual, and transcript cues using said index module.

30. (Original) The computer-executable instructions stored on a computer-readable storage medium as claimed in Claim 29 further comprising the steps of:

retrieving a table of contents stored in said memory unit in response to a user request using a retrieval module; and

causing said table of contents to be displayed.

31.(Original) The computer-executable instructions stored on a computer-readable storage medium as claimed in Claim 25 further comprising the step of:

combining portions of said video signals, audio signals, and text signals of said videotaped material in said multimedia table of contents controller to create a multimedia index.

32.(Original) The computer-executable instructions stored on a computer-readable storage medium as claimed in Claim 31 wherein said multimedia index comprises one of: a specialized multimedia index, a multimedia bibliography, and a multimedia glossary.